

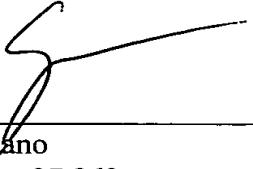
REMARKS

Please insert the attached sequence listing. A copy of the sequence listing in computer readable form, along with a statement, is also being provided.

The amendments to the specification and claims are editorial in nature and serve only to specifically point out the correct sequence ID number.

It is believed that no fee is due in connection with the filing of this document, however, if it is deemed a fee is due, the Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

N THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph on page 24, lines 8-12 with the following amended paragraph:

Figure 16 shows the complete nucleotide (SEQ ID NO: 1) and amino acid (SEQ ID NO: 2) sequences of the c-erbB-2 gene. (Coussens et al. supra.) The gp75 external domain comprises the region from about amino acid number 22 (serine; ser-22) to about amino acid number 653 (serine; ser-653) (said amino acids are marked by black circles above them).

Please replace the paragraph on page 52, lines 7-23 with the following amended paragraph:

The term “pg75” is herein defined to mean a glycoprotein having an approximate molecular weight of 75 kilo Daltons (kd) that constitutes the external domain of the approximately 185 kd glycoprotein (gp185) that is c-erbB-2. The term “gp75” is precisely defined by its nucleotide (SEQ ID NO: 1) and amino acid (SEQ ID NO: 2) sequences shown in Figure 16; the gp75 external domain comprises the region from about amino acid number 22 (serine: ser-22) to about amino acid number 653 (serine: ser-653) (said amino acids are marked by black circles above them in Figure 16) with the nucleotide sequence corresponding thereto. The amino acid sequence represents the nonglycosylated version of gp75 which would be expected to have an approximate molecular weight of 69 kd (Coussens et al., supra). Included with the scope of the term gp75 are glycoproteins produced recombinant by yeast and higher eukaryotes that have varying amounts of glycosylation which affect the molecular weight of the protein product; for example, a small amount of gp90 was produced in stably transformed gp75-expressing CHO cells as indicated in Example 1 below.

Please replace the paragraph on page 53, lines 9-17 with the following amended paragraph:

The phrase gp75 proteins and polypeptides” is herein defined to mean proteins and polypeptides which are encoded by the gp75 external domain DNA sequences as shown in Figure 16 (SEQ ID NO: 1) (nucleotides encoding from approximately ser-22 to approximately ser-653) or by fragments of said gp75 DNA sequence. The phrase “gp75 proteins and polypeptides” is herein

interpreted to include proteins and polypeptides which have substantially the same amino acid sequences and substantially the same biological activity as the "gp75 proteins and polypeptides.

Please replace the paragraph on page 53, lines 19-26 with the following amended paragraph:

It is understood that because of the degeneracy of the genetic code, that is, that more than one codon will code for one amino acid [for example to codons TTA, TTG CTT, CTC, CTA and CTG each code for the amino acid leucine (L)], that variations of the nucleotide sequence of Figure 16 (SEQ ID NO: 1), wherein one codon is substituted for another, would produce a substantially equivalent protein or polypeptide according to this invention. All such variations in the nucleotide sequence for gp75 are included within the scope of this invention.

Please replace the paragraph on page 54, lines 1-21 with the following amended paragraph:

It is further understood that the gp75 DNA sequence as shown in Figure 16 (SEQ ID NO: 1) represents only the precise structure of the naturally occurring nucleotide sequence. It is expected that slightly modified nucleotide sequences will be found or can be modified by techniques known in the art to code for similarly serologically active, immunogenic and/or antigenic proteins and polypeptides, and such nucleotide sequences and proteins/polypeptides are considered to be equivalents for the purpose of this invention. DNA having equivalent codons is considered within the scope of the invention, as are synthetic DNA sequences that encode proteins/polypeptides homologous or substantially homologous to the gp75 DNA sequence and as are DNA sequences that hybridize to the sequence condign fro gp75 proteins/polypeptides, as well as those sequences but for the degeneracy of the genetic code would hybridize to said gp75 sequences. Further, DNA sequences which are complimentary to the gp75 sequences referred to herein are within the scope of this invention. Such modifications are variations of DNA sequences as indicated herein are considered to result in sequences that are substantially the same as the gp75 sequences or portions thereof. Typically, such related nucleotide sequences are substantially the same which fall into the definition of substantially homologous.

IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A recombinant DNA molecule comprising a DNA sequence (SEQ ID NO: 1) that codes for the external domain of the C-erbB-2 protein (SEQ ID NO: 2) (gp75) or for one or more portions of said gp75, wherein said DNA sequence is operatively linked to an expression control sequence in said DNA molecule.